



ZOOM

FIRE-15

MODELING GUITAR AMPLIFIER

Operation Manual

Introduction

Thank you for selecting the **ZOOM MODELING GUITAR AMPLIFIER FIRE-15** (simply called the "FIRE-15" in this manual). Please take the time to read this manual carefully so as to get the most out of this product and to ensure optimum performance and reliability. Please keep this manual in a convenient place for future reference.

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USAGE AND SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

In this manual, symbols are used to highlight warnings and cautions for you to read so that accidents can be prevented. The meanings of these symbols are as follows:



This symbol indicates explanations about extremely dangerous matters. If users ignore this symbol and handle the device the wrong way, serious injury or death could result.



This symbol indicates explanations about dangerous matters. If users ignore this symbol and handle the device the wrong way, bodily injury and damage to the equipment could result.

Please observe the following safety tips and precautions to ensure hazard-free use of the FIRE-15.

• Power requirements



Connect only to AC power outlets rated 100-120 V or 220-240 V 50/60Hz (depending on the voltage range of the unit; refer to the back panel).

When not using the unit for an extended time, disconnect the power cord from the AC outlet.

• Environment



Avoid using your FIRE-15 in environments where it will be exposed to:

- Extreme temperatures
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock

• Handling



The FIRE-15 is a precision instrument. Do not exert undue pressure on the keys and other controls. Also take care not to drop the unit, and do not subject it to shock or excessive pressure.

• Alterations



Never open the case of the FIRE-15 or attempt to modify the product in any way since this can result in damage to the unit.

- **Volume**



Do not use the FIRE-15 at a loud volume for a long time since this can cause hearing impairment.

- **Connecting cables and input and output jacks**



You should always turn off the power to the FIRE-15 and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all connection cables and the power cord before moving the FIRE-15.

Usage Precautions

- **Electrical interference**

For safety considerations, the FIRE-15 has been designed to provide maximum protection against the emission of electromagnetic radiation from inside the device, and protection from external interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves should not be placed near the FIRE-15, as the possibility of interference cannot be ruled out entirely.

With any type of digital control device, the FIRE-15 included, electromagnetic interference can cause malfunctioning and can corrupt or destroy data. Care should be taken to minimize the risk of damage.

- **Cleaning**

Use a soft, dry cloth to clean the FIRE-15. If necessary, slightly moisten the cloth. Do not use abrasive cleanser, wax, or solvents (such as paint thinner or cleaning alcohol), since these may dull the finish or damage the surface.

Please keep this manual in a convenient place for future reference.

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Features

- **Versatile guitar amplifier and compact effect sound modeling**

The FIRE-15 lets you select from 11 drive types which faithfully duplicate the sound of famous guitar amplifiers and compact effects. The available choices range from vintage amps to modern distortion sounds, and everything in between. There is also a function for boosting the sound and prolonging sustain simply by pushing a key.

- **Digital effects ideal for guitar play**

The FIRE-15 also incorporates a full range of modulation effects and reverb/delay effects.

- **Store amp settings as “patches”**

Multiple amplifier and effect settings can be easily stored as user “patches”. This allows you to instantly call up a desired combination of settings and effects, using the keys on the panel of the unit or using an optional foot switch. A number of preset patches with recommended settings are also available.

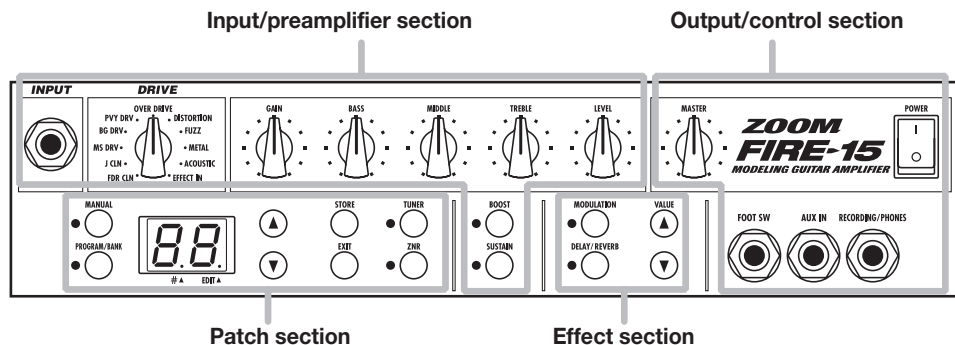
- **Built-in auto-chromatic tuner**

An easy-to-use auto-chromatic tuner is built right into the unit.

- **Versatile input/output configuration**

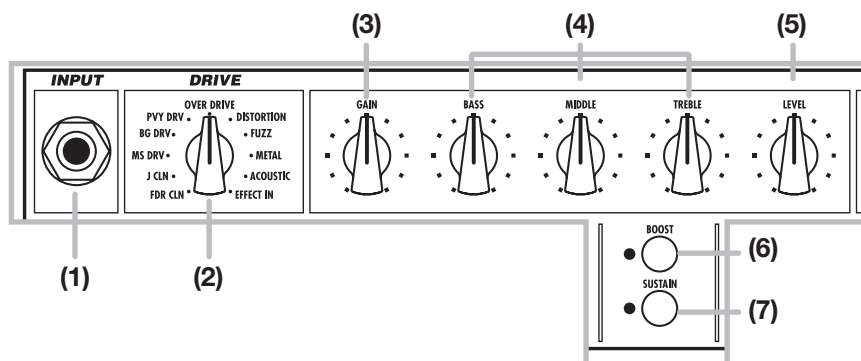
The AUX IN jack makes it easy to connect a CD player, MD player or other source device. The RECORDING/PHONES jack lets you plug in a pair of headphones or a recorder.

Controls and Functions



◆ Input/preamplifier section

This section comprises the input jack and controls for adjusting distortion depth and tone.



(1) [INPUT] jack

Connect the electric guitar here, using a dedicated instrument cable.

(2) [DRIVE TYPE] knob

Selects the simulated amp type and distortion (drive) type.

(3) [GAIN] knob

Adjusts the input gain. Turning this knob up increases distortion depth.

(4) [BASS]/[MIDDLE]/[TREBLE] knobs

This is a 3-band equalizer that allows boost/cut in the low, medium, and high frequency range.

(5) [LEVEL] knob

Adjusts the volume after passing the preamplifier.

(6) [BOOST] key

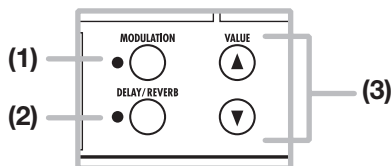
Setting this key to ON (LED lit) boosts the sound pressure level.

(7) [SUSTAIN] key

Setting this key to ON (LED lit) produces longer sustain.

◆ Effect section

This section controls the built-in digital effects. The FIRE-15 provides modulation effects and delay/reverb effects.



(1) [MODULATION] key

Switches the modulation effect on and off.

(2) [DELAY/REVERB] key

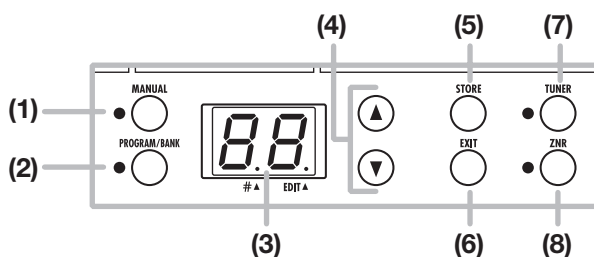
Switches the delay/reverb effect on and off.

(3) VALUE [▲]/[▼] keys

Used to change effect settings and values.

◆ Patch section

This section lets you store and recall effect patches. It also serves to operate the built-in tuner and noise reduction functions.



(1) [MANUAL] key

(2) [PROGRAM/BANK] key

This key switches between manual mode, where you use the controls on the front panel to shape the sound, and program mode where you use settings stored in preprogrammed patches.

When the [MANUAL] key is ON (LED lit), the manual mode is selected. When the [PROGRAM/BANK] key is ON (LED lit), the program mode is selected. (The default setting at power-on is manual mode.)

(3) Display

Shows the number of the currently selected patch, or the value of setting parameters of the FIRE-15.

(4) [▲]/[▼] keys

Serve to switch between patches and to adjust ZNR (ZOOM Noise Reduction).

(5) [STORE] key

Stores the current settings as a user patch.

(6) [EXIT] key

Cancels an operation and calls up the number of the currently selected patch onto the display.

(7) [TUNER] key

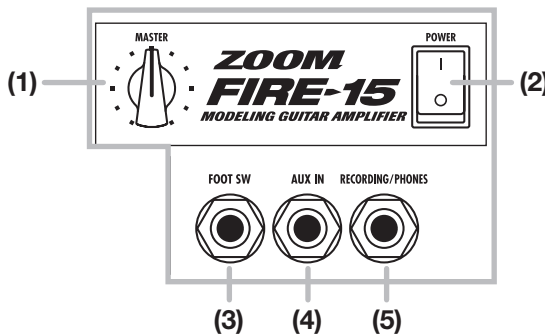
This key activates the built-in tuner of the FIRE-15.

(8) [ZNR] key

This key turns ZOOM Noise Reduction on or off. (ZNR is ON by default at power-on.)

◆ Output/control section

This section lets you adjust the overall amp volume and connect external devices including a foot switch.

**(1) [MASTER] knob**

Adjusts the volume.

(2) [POWER] switch

Controls the power on/off status.

(3) FOOT SW jack

A separately available foot switch (ZOOM FS-01) can be connected here, allowing you to toggle between manual mode and program mode with your foot.

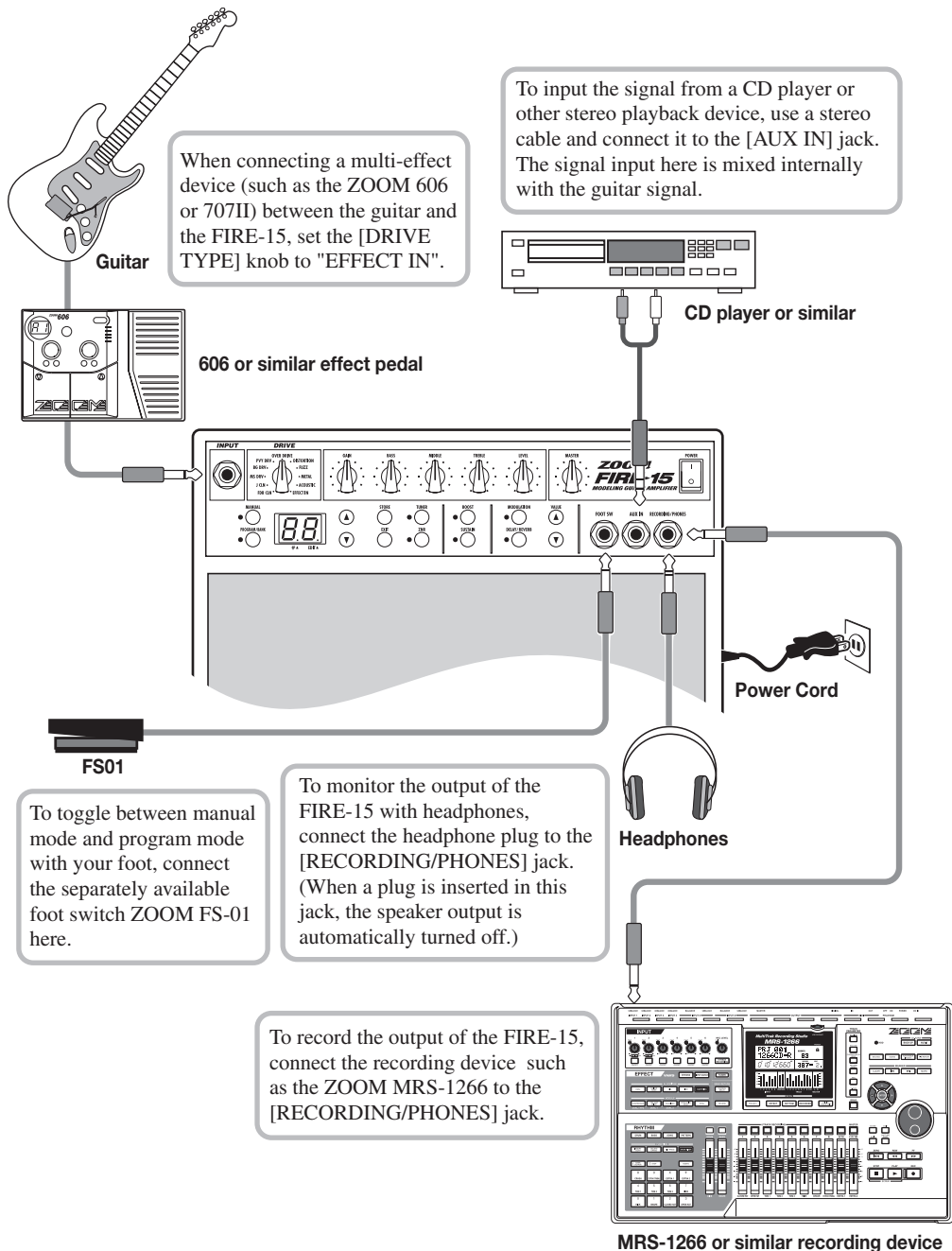
(4) [AUX IN] jack

This is a stereo input that accepts the signal from a CD player or MD player.

(5) [RECORDING/PHONES] jack

This is a stereo output that can be used to connect a recording device or a pair of headphones.

Connections



Using the FIRE-15

This section explains how to operate the panel controls and how to use patches and other functions of the FIRE-15.

Basic operation

1. Verify that the [MASTER] knob is turned to the 0 position. Then turn the [POWER] switch on. Set the [GAIN]/[BASS]/[MIDDLE]/[TREBLE]/[LEVEL] knobs to the center position.

Immediately after turning on the power, the manual mode is selected ([MANUAL] key is lit).



Display in manual mode

2. Use the [DRIVE TYPE] knob to select the drive type.

The [DRIVE TYPE] knob selects the modeling material (amp or distortion type). The distortion depth will differ, depending on the selected drive type. (For information on available drive types, see page 16.)

3. Raise the [MASTER] knob to a suitable position, and adjust the distortion depth and volume with the [GAIN] knob and [LEVEL] knob while playing your guitar.

Normally, you will use the [GAIN] knob to adjust distortion depth and the [LEVEL] knob to adjust the level for a particular patch. The [MASTER] knob controls the overall volume, common to all patches.

4. Use the [BASS]/[MIDDLE]/[TREBLE] knobs to adjust the tone.

You can also use the [BOOST] key and the [SUSTAIN] key to increase the sound pressure and prolong sustain.

5. To change the ZNR (ZOOM Noise Reduction) setting, press the [ZNR] key.

The LED of the key flashes, and the current setting (Z1 - Z9, oF) is shown for about 2 seconds on the display. Use the [▲]/[▼] keys to select the new setting. To switch ZNR on or off, press the [ZNR] key once more. Higher setting values result in more effective noise reduction. Set the value as high as possible without causing the sound to be cut off abruptly.

6. To turn the unit off, turn the [MASTER] knob all the way down and then turn off the [POWER] switch.

Using effects

Immediately after turning on the FIRE-15, the [MANUAL] key LED is lit, and the internal effects (modulation, delay/reverb) are off. This section explains how to activate the effects and use them to achieve various kinds of sound.

1. Press the key for the desired effect in the effect section.

To use the modulation effect, press the [MODULATION] key. To use the delay/reverb effect, press the [DELAY/REVERB] key.

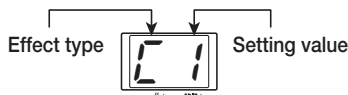
The respective LED flashes, and the indication "oF" (effect off) is shown on the display for 2 second.



2. While "oF" is shown, press the same key once more.

If you press the key while "oF" is visible on the display, the effect is turned on, and the effect type and setting value are shown on the display.

For example, if you press the [MODULATION] key in step 1, the effect type is shown as "C" (chorus), and the setting value as "1".



3. Use the VALUE [▲]/[▼] keys to select the desired effect type and setting value.

You can select one effect from a number of choices for the modulation effect and the delay/reverb effect, and then you can adjust the intensity of the effect by setting the value of a parameter. For information on effect types and setting values, see page 17 - page 20. To change the effect type and setting value, proceed as follows.

- **To increase or decrease the setting value by one step**

When you press one of the VALUE [▲]/[▼] keys, the setting value changes by one step, such as C1 → C2 → C3 or C9 → C8 → C7. When the maximum or minimum setting is reached, the unit switches to the minimum or maximum setting of the next effect type, such as C9 → F1 or H1 → F9.

- **To switch the effect type**

When you press both of the VALUE [▲]/[▼] keys together, the setting switches to the minimum of the next effect type, such as C5 → F1 or F3 → H1.

HINT

- You can use a modulation effect and a delay/reverb effect simultaneously. If necessary, perform the above steps again for the other effect.
- In program mode, you can call up a patch and change the effect setting.
- When the effect in the selected patch is off, you can select an effect type and setting value by performing steps 1 - 3.
- When the effect in the selected patch is on ([MODULATION] key or [DELAY/REVERB] key LED lit), you can press the key whose LED is lit to call up the effect type and setting value onto the display. You can then use the VALUE [▲]/[▼] keys to change the effect type and/or setting value.

Loading and storing patches

The FIRE-15 offers a bank of ten read/write user patches (U) and a bank of ten read-only preset patches (P). Patches in each bank are numbered 0 - 9.

This section explains how to call up stored user patches or preset patches and how to save amplifier and effect settings in a user patch.

◆ Loading a patch

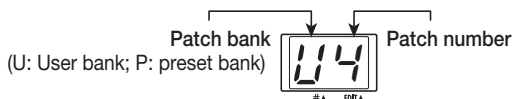
1. Press the [PROGRAM/BANK] key in the patch section, so that the LED lights up.

The current settings of the knobs and controls on the panel become inactive, and the settings of the patch shown on the display are enabled.



2. Use the [▲]/[▼] keys to select the bank and number of the desired patch.

With the [▲]/[▼] keys, you can cycle through the patches in the order U0 - U9 → P0 → P9 ... For information on factory default patch contents, see page 23.



When you press the [PROGRAM/BANK] key, the patch number stays the same and only the bank is toggled: U1 → P1 → U1.

3. Operate the controls in the input/preamp section and the effect section as required, to adjust the distortion, tone, volume, effect type and intensity, etc.

If a control has been operated after a patch was loaded, a dot appears at the bottom right of the display. This indicates that the contents of the patch have changed. (When you return to the original settings, the dot disappears.)



HINT

You can store the contents of a changed user patch by pressing the [STORE] key. For information on the procedure, see the section "Storing a patch".

NOTE

If you have changed some settings and then select another patch, the settings of the previous patch will return to the stored condition. If you want to preserve your changes, store the user patch.

◆ Storing a patch

NOTE

When you store a patch, any patch currently stored under the same number will be overwritten (erased and replaced with the new settings). Take care not to accidentally erase a patch that you want to keep.

1. Use the knobs and keys on the panel to establish the desired sound.

2. Press the [STORE] key in the patch section.

The indication "U" (for user bank) and the patch number (0 - 9) are shown on the display. In this condition, storing the settings as a user patch is possible.



3. Use the [▲]/[▼] keys to select the desired user patch (U0 - U9).

The preset patches (P0 - P9) are read-only. They cannot be selected as target for storing a user patch.



4. To store the patch, press the [STORE] key once more.

The store process is carried out, and the unit goes into program mode.

HINT

By calling up an existing patch and then selecting another destination for the store process, copying a patch is possible.

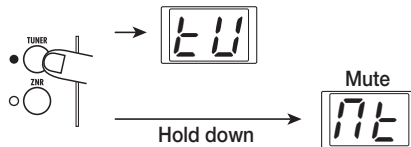
Using the built-in tuner

The FIRE-15 incorporates an auto-chromatic tuner which can be activated by pressing the [TUNER] key.

1. Press the [TUNER] key in the patch section.

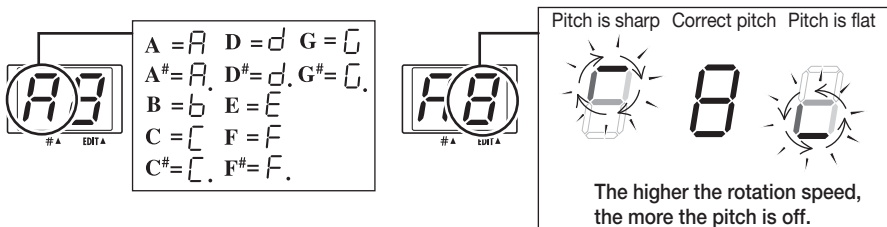
The LED of the key lights up and the internal tuner becomes active.

If you want to tune while keeping the sound output on, press the [TUNER] key only briefly. (The display indication shows "tU".) If you want to tune while the sound is muted, hold down the [TUNER] key somewhat longer. (Release the key when the display indication shows "Mt".)



2. Play the open string you want to tune

The left side of the display shows the note which is closest to the current pitch. The right side of the display shows how far the pitch is off. Adjust the pitch while observing the display.



3. To change the tuner reference pitch, press one of the [▲]/[▼] keys.

The current reference pitch is shown for two seconds. The default setting is "40" (center A = 440 Hz).



- 4. While the reference pitch is shown, you can use the [▲]/[▼] keys to change the setting.**

The setting range is 35 - 45 (center A = 435 Hz - 445 Hz).



When power is turned off and on again, the reference pitch is reset to "40" (center A = 440 Hz).

- 5. When tuning is complete, press the [TUNER] key to turn the tuner off.**

The tuner function is disabled.



During use of the tuner, effects are turned off.

Switching the mode with the foot switch

Using the separately available foot switch, you can toggle between manual mode and program mode during play.

- 1. Turn off power to the FIRE-15 and connect the foot switch FS-01 (available separately) to the [FOOT SW] jack.**



Please do not connect or disconnect the foot switch while power is turned on.

- 2. Turn power to the FIRE-15 on.**

The FIRE-15 is in manual mode.



Display in manual mode

- 3. Press the foot switch while you are playing your instrument.**

When you push the foot switch, the FIRE-15 switches to program mode, and the currently selected patch becomes active. If required, use the [PROGRAM/BANK] key and [▲]/[▼] keys to

switch the bank and patch number.



Program mode display

- 4.** To return to manual mode, press the foot switch again, or press the [MANUAL] key.

Returning the FIRE-15 to the factory default settings (all initialize)

If required, you can return the settings of the user patches (U0 - U9) to the condition in which the unit was shipped. (This function is called "all initialize".)



NOTE

When you carry out this function, any settings that you have stored in user patches will be lost. Proceed with care.

- 1.** Hold down the [STORE] key while turning power to the unit on.

The indication "AL" appears on the display.














- 2.** To execute the all initialize function, press the [STORE] key once more.

All user patches are returned to the factory default condition. If you wish to cancel the process, press the [EXIT] key instead of the [STORE] key.

Drive Types and Effect Types

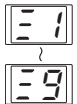
■ DRIVE

Selects the modeling material (amp) and distortion type (drive type).

Drive type	Display	Description
FDR CLN		Clean built-in type tube amp sound.
J CLN		Clean bright combo amp sound.
MS DRV		British-style tube stack amp drive sound.
BG DRV		Tube stack amp drive sound with prominent midrange.
PVY DRV		Tube stack amp drive sound in heavy metal style.
OVER DRIVE		Sound of dry overdrive effect connected to combo amp.
DISTORTION		Sound of fully revved up distortion effect connected to combo amp.
FUZZ		Sound of nostalgic sixties fuzz connected to stack amp.
METAL		Heavy metal sound with strong high and low boost. Great for 7-string guitar.
ACOUSTIC		Changes the sound of an electric guitar into that of an acoustic guitar.
EFFECT IN		Clean guitar amp sound great for direct input from a ZOOM multi-effect processor.

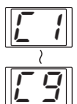
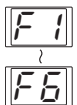
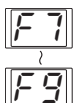


■ ZNR



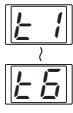
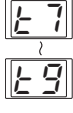





This is ZOOM's original noise reduction which suppresses noise during play pauses. Use the [ZNR] key to turn the function on and off, and use the [▲]/[▼] keys to adjust the setting value.













	Setting value	Description
ZNR		Higher settings result in more effective noise reduction. Set the value as high as possible without causing the sound to be cut off abruptly.

■ MODULATION

This effect adds body and to the guitar sound. Use the [MODULATION] key to turn the effect on and off, and use the [▲]/[▼] keys to select the effect type and the setting value.


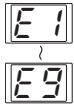


Effect type	Setting value	Description
CHORUS		Mixes pitch-shifted components (up and down) to original signal, for spacious and solid sound. Higher setting values result in deeper chorus effect.
FLANGER		Pitch-up/down modulation adds pronounced character to the sound. Higher setting values result in faster modulation.
FLANGER →CHORUS		Serial connection of flanger and chorus. Higher setting values result in faster flanger modulation. (Chorus depth is fixed.)
PHASE		Adds a swooshing modulation to the sound. Higher setting values result in faster flanger modulation.
PHASE→CHORUS		Serial connection of phaser and chorus. Higher setting values result in faster phaser modulation. (Chorus depth is fixed.)

DOUBLING		This effect adds a very short-delay sound to the original sound, which gives the impression of several players playing the same phrase, resulting in more solid sound. Higher setting values result in stronger doubling action.
DOUBLING →CHORUS		Serial connection of doubling and chorus. Higher setting values result in stronger doubling action. (Chorus depth is fixed.)
TREMOLO		This effect varies the volume periodically. Higher setting values result in faster tremolo.
TREMOLO →CHORUS		Serial connection of tremolo and chorus. Higher setting values result in faster tremolo. (Chorus depth is fixed.)
AUTO WAH		This is an effect that automatically adds wah depending on the playing intensity. Higher setting values result in higher auto wah start sensitivity, producing wah even with low-level signals.
AUTO WAH →CHORUS		Serial connection of auto wah and chorus. Higher setting values result in higher auto wah start sensitivity. (Chorus depth is fixed.)
STEP		This effect causes random pitch changes and creates an auto arpeggio sound. Higher setting values result in faster sound change.
STEP→CHORUS		Serial connection of step and chorus. Higher setting values result in faster sound change. (Chorus depth is fixed.)
SLOW-A		This effect slows down the sound attack speed, resulting in the impression of “violin playing”. Higher setting values result in slower attack speed.

SLOW-A→PITCH		Serial connection of slow attack and pitch shift. Higher setting values result in slower attack speed. (Pitch shift is fixed to one octave higher.)
PITCH	This effect varies the pitch of the original sound. You can select one of nine preset pitch shift patterns (P1 - P9).	
		Mixes the original sound and a sound component shifted one octave down.
		Mixes the original sound and a sound component shifted a perfect fifth down.
		Adds a chorus effect to the P2 setting.
		Mixes the original sound and a sound component shifted a perfect fourth down.
		Adds a chorus effect to the P4 setting.
		Mixes the original sound and a sound component shifted one octave up.
		Mixes the original sound and a sound component shifted slightly, resulting in a chorus effect with only slight modulation.
		Mixes the original sound and sound components shifted a perfect fourth down and up.
		Mixes the original sound and sound components shifted an octave down and up.
RING MOD		Adds amplitude modulation to the sound, resulting in a metallic effect. Higher setting values result in higher modulation frequency.
RING MOD →CHORUS		Serial connection of ring modulator and chorus. Higher setting values result in higher modulation frequency. (Chorus depth is fixed.)

■ DELAY/REVERB

This effect adds a delayed component or reverb to the guitar sound. Use the [DELAY/REVERB] key to turn the effect on and off, and use the [▲]/[▼] keys to select the effect type and the setting value.

Effect type	Setting value	Description
DELAY		This is a conventional digital delay effect. Higher setting values result in longer delay time. The mix/feedback amount is set to an optimum value.
ECHO		This delay effect recreates the warm sound of a tape echo. Higher setting values result in longer delay time. The mix/feedback amount is set to an optimum value.
ROOM		This effect simulates reverberation in a room. Higher values result in a deeper effect.
HALL		This effect simulates reverberation in a hall. Higher values result in a deeper effect.

Specifications

Power Output	15 W RMS
Speaker	20 cm, 8 ohms
Inputs	Guitar input : standard mono phone jack (nominal input level -20 dBm, input impedance 470 kilohms) AUX IN : standard stereo phone jack (nominal input level -20 dBm, input impedance 10 kilohms)
Output	Combined recording/headphone output : standard stereo phone jack (nominal output level +4 dBm with output load impedance 10 kilohms or higher)
Drive	11 types
Effect Programs	17 types (10 MODULATION + 4 DELAY/REVERB + BOOST + SUSTAIN + ZNR)
Effect Modules	5 modules (MODULATION + DELAY/REVERB + BOOST + SUSTAIN + ZNR)
Program Patches	USER : 10 (rewritable, with store) PRESET : 10 Total 20 patches
Sampling Frequency	31.25 kHz
A/D Conversion	20-bit, 64-times oversampling
D/A Conversion	20-bit, 8-times oversampling
Control Connector	FOOT SW (FS01)
Display	2-position 7-segment LED
Dimension	400 mm (W) x 205 mm (D) x 380 mm (H)
Weight	10 kg
Included Items	Power Cord

**0 dBm = 0.775 Vrms*

**Design and specifications subject to change without notice.*

Troubleshooting

- **Power does not come on.**

- Is power cord correctly plugged into AC outlet?
- Is [POWER] switch set to ON?

- **No sound, or low volume.**

- Is the guitar correctly connected to the FIRE-15?
See page 8 for information on connections.
- Is something plugged into the [RECORDING/PHONES] jack?
If something is plugged into the [RECORDING/PHONES] jack, the speaker is automatically cut off.
- Is the [LEVEL] knob or [MASTER] knob turned down?
Turn the knobs clockwise while playing your guitar.

- **Sound is too distorted or breaks up.**

- [GAIN]/[LEVEL] knobs may be turned up too high?
Turn the knobs counter-clockwise. Adjust the volume with the [MASTER] knob.

- **The foot switch does not toggle modes.**

- Is a ZOOM foot switch connected?
Use only the foot switch ZOOM FS-01.

Patch List

BANK	PATCH	PATCH NAME	DRIVE TYPE	COMMENT
U [USER]	0	Tune Up Drive	PVY DRV	Smooth, transparent distortion sound
	1	Best Crunch	MS DRV	Wide crunch sound for backing and lead
	2	Funk Beat	J CLN	Suitable from arpeggio to 16 beat cutting
	3	Cry Lead	BG DRV	Combination of the auto wah and distortion
	4	Tremolo	FDR CLN	Amp sound with tremolo
	5	Drive Lead	BG DRV	Lead sound with delay
	6	Deep Chorus	EFFECT IN	Deep, gorgeous chorus sound
	7	JET CURRENT	PVY DRV	Standard flanging jet sound
	8	Light Back	EFFECT IN	Light taste auto wah sound
	9	Pitched Metal	METAL	Heavy sound added downer 1-octave pitch shift sound
P [PRESET]	0	PVY-Drive	PVY DRV	High-gain amp sound
	1	J-Clean	J CLN	Standard amp sound with chorus
	2	MS-Drive	MS DRV	MS drive sound
	3	FDR-Clean	FDR CLN	US clean combo amp sound
	4	BG-Drive	BG DRV	Sound for sweet, mellow lead
	5	Distortion	DISTORTION	Standard distortion sound
	6	OverDrive	OVER DRIVE	Almighty overdrive sound
	7	Acoustic	ACOUSTIC	Simulation of the acoustic guitar sound
	8	Fuzz	FUZZ	High-quality fuzz sound
	9	Metal	METAL	Simulation of the metal sound



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